

```

VVV      VVV  MMM      MMM      SSSSSSSSSSSSS  LLL      IIIIIIIII  000000000000
VVV      VVV  MMM      MMM      SSSSSSSSSSSSS  LLL      IIIIIIIII  000000000000
VVV      VVV  MMM      MMM      SSSSSSSSSSSSS  LLL      IIIIIIIII  000000000000
VVV      VVV  MMMMMM  MMMMMM  SSS      LLL      III      000      000
VVV      VVV  MMMMMM  MMMMMM  SSS      LLL      III      000      000
VVV      VVV  MMMMMM  MMMMMM  SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSSSSSSSSS  LLL      III      000000000000
VVV      VVV  MMM      MMM      SSSSSSSSSS  LLL      III      000000000000
VVV      VVV  MMM      MMM      SSSSSSSSSS  LLL      III      000000000000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSS      LLL      III      000      000
VVV      VVV  MMM      MMM      SSSSSSSSSSSS  LLLLLLLLLLLLLLLLL  IIIIIIIII  000000000000
VVV      VVV  MMM      MMM      SSSSSSSSSSSS  LLLLLLLLLLLLLLLLL  IIIIIIIII  000000000000
VVV      VVV  MMM      MMM      SSSSSSSSSSSS  LLLLLLLLLLLLLLLLL  IIIIIIIII  000000000000

```

```

SSSSSSSS YY YY IIIIII TTTTTTTTTT AAAAAA BBBB BBBB LL EEEEEEEEE
SSSSSSSS YY YY IIIIII TTTTTTTTTT AAAAAA BBBB BBBB LL EEEEEEEEE
SS YY YY YY YY I I T T AA AA BB BB LL EE
SS YY YY YY YY I I T T AA AA BB BB LL EE
SS YY YY YY YY I I T T AA AA BB BB LL EE
SSSSSS YY YY YY YY I I T T AA AA BBBB BBBB LL EEEEEEE
SSSSSS YY YY YY YY I I T T AA AA BBBB BBBB LL EEEEEEE
SS YY YY YY YY I I T T AAAAAAAAAA BB BB LL EE
SS YY YY YY YY I I T T AAAAAAAAAA BB BB LL EE
SS YY YY YY YY I I T T AA AA BB BB LL EE
SSSSSS YY YY IIIIII T T AA AA BBBB BBBB LLLLLLLLLL EEEEEEEEE
SSSSSS YY YY IIIIII T T AA AA BBBB BBBB LLLLLLLLLL EEEEEEEEE

```

```

MM MM AAAAAA RRRRRRRR
MM MM AAAAAA RRRRRRRR
MMM MMM AA AA RR RR
MMM MMM AA AA RR RR
MM MM AA AA RR RR
MM MM AA AA RRRRRRRR
MM MM AA AA RRRRRRRR
MM MM AAAAAAAAAA RR RR
MM MM AAAAAAAAAA RR RR
MM MM AA AA RR RR
MM MM AA AA RR RR
MM MM AA AA RR RR
MM MM AA AA RR RR

```

.IDENT 'V04-000'

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ENVIRONMENT: prefix file

AUTHOR: Ken Henderson CREATION DATE: 15 Feb 1983

MODIFIED BY:

V03-011 CWH3011 CW Hobbs 24-Jul-1984
Add WS_OPA0 bit, workstation using QVSS console.

V03-010 WMC0003 Wayne Cardoza 2-Feb-1984
Need at least one bit set in PAGEFILE_PAGE

V03-009 WMC0002 Wayne Cardoza 31-Jan-1984
Add emulated instruction flags.

V03-008 WMC0001 Wayne Cardoza 01-JAN-1984
Add page and swap file data.

V03-007 KFH0006 Ken Henderson 18 Aug 1983
Change SCS_EXISTS to boolean
Changed SID back to DECNUM

V03-006 KFH0005 Ken Henderson 28 Jul 1983
Add SCS\$GA_EXISTS, delete SERIAL, MFGPLANT,
HWREVISION, ALLOCLASS and the login security params

V03-005 GAS0142 Gerry Smith 23-Jun-1983
Add ALLOCLASS, and the login security parameters

V03-004 KFH0004 Ken Henderson 16 Jun 1983
Changed SID to HEXNUM, NODE_AREA and
NODE_NUMBER to 4 bytes long.

V03-003 KFH0003 Ken Henderson 21 May 1983
Added cluster item-codes.

V03-002 KFH0002 Ken Henderson 8 Mar 1983
Added BOOTTIME item-code.

V03-001 KFH0001 Ken Henderson 22 Feb 1983
Added SERIAL, MFGPLANT, and HWREVISION
item-codes.

.MACRO SYI_ITEMTABLES

++
ABSTRACT:

SYI_ITEMTABLES macro

This macro expands to generate multiple calls to the SYI_ITEM_CODE macro, which must be previously locally defined in the module which invokes SYI_GENERATE_TABLE. The SYI_GENERATE_TABLE macro calls SYI_ITEMTABLES once - to define the GETSYI-item-codes that are Not SYSBOOT parameters.

The parameters that are passed to the SYI_ITEM_CODE macro follow:

BASE	determines which EXE\$GETSYI table to use. It's tables correspond roughly to the source of the data. The legal parameter values here are: EXE, FLD	
NAME	is the name of the SY\$GETSYI item-code. The legal parameter values here are determined by the \$SYIDEF macro (in [VMSLIB.SRC]STARDEFQZ.SDL).	
SOURCE	is either an address of a cell, or a processor register number (as determined by the BASE parameter).	
DTYPE	is both a datatype and a usage indicator. The legal values and examples for this parameter follow:	
	STDTIM	(CTL\$GQ_LOGIN) 64 bit time
	STDUIC	(PCBSL_OIC) user ID code
	HEXNUM	(CTL\$AQ_EXCVEC) hex number
	HEXSTR	(CLUB\$B_FSYSID) hex string
	DECNUM	(PCBSL_BYTLM) decimal number
	PRVMSK	(PHD\$Q_PRIVMSK) privilege mask
	STRDSC	(CTL\$GC_IMGHDRBF) string descr
	CNTSTR	(PCBST_TERMINAL) counted string
	PADSTR	(JIB\$T_ACCOUNT) blank padded str
	BITVEC	(PCBSL_STS) bit vector
	BITVAL	(JIB\$V_TERMIDIAL) boolean quantity
BITPOS	is the bit position for FLD data items.	
BITSIZ	is the bit size of FLD data items.	
OUTLEN	is used by EXE\$GETSYI in fetching information (number of bytes).	

```
;BASE, NAME, SOURCE, DTYPE, BITPOS, BITSIZ, OUTLEN
;
```

```
; 64-bit abs. system at system boot
```

```
SYI_ITEM_CODE =
EXE, BOOTTIME, EXESGQ_BOOTTIME, STDTIM, 0, 0, 8
```

```
; software version number
```

```
SYI_ITEM_CODE =
EXE, VERSION, SYSSGQ_VERSION, PADSTR, 0, 0, 8
```

```
; system ID register
```

```
SYI_ITEM_CODE =
EXE, SID, PRS_SID, DECNUM, 0, 0, 4
```

```
; total nodes in cluster
```

```
SYI_ITEM_CODE =
EXE, CLUSTER_NODES, CLUB$W_NODES, DECNUM, 0, 0, 2
```

```
; total votes in cluster
```

```
SYI_ITEM_CODE =
EXE, CLUSTER_VOTES, CLUB$W_VOTES, DECNUM, 0, 0, 2
```

```
; total quorum in cluster
```

```
SYI_ITEM_CODE =
EXE, CLUSTER_QUORUM, CLUB$W_QUORUM, DECNUM, 0, 0, 2
```

```
; founding system id
```

```
SYI_ITEM_CODE =
EXE, CLUSTER_FSYSID, CLUB$B_FSYSID, HEXNUM, 0, 0, 6
```

```
; founding boottime
```

```
SYI_ITEM_CODE =
EXE, CLUSTER_FTIME, CLUB$Q_FTIME, STDTIM, 0, 0, 8
```

```
; cluster membership status
```

```
SYI_ITEM_CODE =
EXE, CLUSTER_MEMBER, CLUGL_CLUB, BITVAL, 0, 0, 1
```

```
;BASE, NAME, SOURCE, DTYPE, BITPOS, BITSIZ, OUTLEN
;
```

```
; CSID of target
```

```
SYI_ITEM_CODE =
EXE, NODE_CSID, CSB$L_CSID, HEXNUM, 0, 0, 4
```

```
; votes of target
```

```
SYI_ITEM_CODE =
EXE, NODE_VOTES, CSB$W_VOTES, DECNUM, 0, 0, 2
```

```
; quorum of target
```

```
SYI_ITEM_CODE =
EXE, NODE_QUORUM, CSB$W_QUORUM, DECNUM, 0, 0, 2
```

; system id of target

```
SYI_ITEM CODE -  
EXE,  NODE_SYSTEMID,  SB$B_SYSTEMID,  HEXSTR, 0,      0,      6
```

; decnet area of target

```
SYI_ITEM CODE -  
FLD,  NODE_AREA,      SB$B_SYSTEMID,  DECNUM, 10,     6,      4
```

; decnet number of target

```
SYI_ITEM CODE -  
FLD,  NODE_NUMBER,    SB$B_SYSTEMID,  DECNUM, 0,      10,     4
```

; S/W incarnation of target

```
SYI_ITEM CODE -  
EXE,  NODE_SWINCARN,  SB$Q_SWINCARN,  HEXSTR, 0,      0,      8
```

; S/W type of target

```
SYI_ITEM CODE -  
EXE,  NODE_SWTYPE,    SB$T_SWTYPE,    PADSTR, 0,      0,      4
```

; S/W version of target

```
SYI_ITEM CODE -  
EXE,  NODE_SWVERS,    SB$T_SWVERS,    PADSTR, 0,      0,      4
```

; H/W type of target

```
SYI_ITEM CODE -  
EXE,  NODE_HWTYPE,    SB$T_HWTYPE,    PADSTR, 0,      0,      4
```

; H/W version of target

```
SYI_ITEM CODE -  
EXE,  NODE_HWVERS,    SB$B_HWVERS,    HEXSTR, 0,      0,     12
```

; Nodename of target

```
SYI_ITEM CODE -  
EXE,  NODENAME,       SB$T_NODENAME,  CNTSTR, 0,      0,     16
```

; Architecture Flags

```
SYI_ITEM CODE -  
EXE,  ARCHFLAG,       EXE$GL_ARCHFLAG, BITVEC, 0,      0,      4
```

```
SYI_ITEM CODE -  
FLD, CHARACTER_EMULATED, EXE$GL_ARCHFLAG, BITVAL, ARCSV_CHAR_EMUL, 1, 1
```

```
SYI_ITEM CODE -  
FLD, DECIMAL_EMULATED,  EXE$GL_ARCHFLAG, BITVAL, ARCSV_DCML_EMUL, 1, 1
```

```
SYI_ITEM CODE -  
FLD, D_FLOAT_EMULATED,  EXE$GL_ARCHFLAG, BITVAL, ARCSV_DFLT_EMUL, 1, 1
```

```
SYI_ITEM CODE -  
FLD, F_FLOAT_EMULATED,  EXE$GL_ARCHFLAG, BITVAL, ARCSV_FFLT_EMUL, 1, 1
```

```
SYI_ITEM CODE -  
FLD, G_FLOAT_EMULATED,  EXE$GL_ARCHFLAG, BITVAL, ARCSV_GFLT_EMUL, 1, 1
```

```
SYI_ITEM CODE -  
FLD, H_FLOAT_EMULATED,  EXE$GL_ARCHFLAG, BITVAL, ARCSV_HFLT_EMUL, 1, 1
```

; Workstation flags

```
SYI_ITEM CODE -  
FLD, WS_OPAO,         EXE$GL_WSFLAGS,  BITVAL, EXE$V_OPAO, 1, 1
```



```

; BASE, NAME, SOURCE, DTYPE, BITPOS, BITSIZ, OUTLEN
; CPU type
SYI_ITEM_CODE -
FLD, CPU, PRS_SID, DECNUM PRSV_SID_TYPE, PRSS_SID_TYPE, 4
; Flag to show whether SCS is loaded
SYI_ITEM_CODE -
EXE, SCS_EXISTS, SCS$GA_EXISTS, BITVAL, 0, 0, 1
; Total size of page files
SYI_ITEM_CODE -
EXE, PAGEFILE_PAGE, 4+0, DECNUM, 0, 0, 4
; Total size of swap files
SYI_ITEM_CODE -
EXE, SWAPFILE_PAGE, 4+1, DECNUM, 0, 0, 4
; Free pagefile pages
SYI_ITEM_CODE -
EXE, PAGEFILE_FREE, 4+2, DECNUM, 0, 0, 4
; Free swapfile pages
SYI_ITEM_CODE -
EXE, SWAPFILE_FREE, 4+3, DECNUM, 0, 0, 4
.ENDM SYI_ITEMTABLES
```


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